



IFWO

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:55

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

3 <110> APPLICANT: Liew, Choong-Chin  
5 <120> TITLE OF INVENTION: Method for the Detection of Alzheimer's Disease Related

## Gene Transcripts

6 in Blood  
8 <130> FILE REFERENCE: 4231/2055R  
10 <140> CURRENT APPLICATION NUMBER: 10/812,827  
11 <141> CURRENT FILING DATE: 2004-3-30  
13 <150> PRIOR APPLICATION NUMBER: US 10/802,875  
14 <151> PRIOR FILING DATE: 2004-03-12  
16 <150> PRIOR APPLICATION NUMBER: US 10/601,518  
17 <151> PRIOR FILING DATE: 2003-06-20  
19 <150> PRIOR APPLICATION NUMBER: US 10/268,730  
20 <151> PRIOR FILING DATE: 2002-10-09  
22 <150> PRIOR APPLICATION NUMBER: US 10/085,783  
23 <151> PRIOR FILING DATE: 2002-02-28  
25 <150> PRIOR APPLICATION NUMBER: US 09/477,148  
26 <151> PRIOR FILING DATE: 2000-01-04  
28 <150> PRIOR APPLICATION NUMBER: US 60/271,955  
29 <151> PRIOR FILING DATE: 2001-02-28  
31 <150> PRIOR APPLICATION NUMBER: US 60/305,340  
32 <151> PRIOR FILING DATE: 2001-07-13  
34 <150> PRIOR APPLICATION NUMBER: US 60/275,017  
35 <151> PRIOR FILING DATE: 2001-03-12  
37 <150> PRIOR APPLICATION NUMBER: US 60/115,125  
38 <151> PRIOR FILING DATE: 1999-01-06  
40 <160> NUMBER OF SEQ ID NOS: 112  
42 <170> SOFTWARE: PatentIn version 3.2  
44 <210> SEQ ID NO: 1  
45 <211> LENGTH: 110  
46 <212> TYPE: DNA  
47 <213> ORGANISM: Human  
49 <400> SEQUENCE: 1  
50 acacaacgta acaataacat attagccaa tgttagtagac tgctatataa tacatttagag 60  
52 tgtcaattca ttccgtttac agccccattg ggtgtcaaat tttttttgtt 110  
55 <210> SEQ ID NO: 2  
56 <211> LENGTH: 530  
57 <212> TYPE: DNA  
58 <213> ORGANISM: Human  
61 <220> FEATURE:  
62 <221> NAME/KEY: misc\_feature  
63 <222> LOCATION: (16)..(16)  
64 <223> OTHER INFORMATION: n is a, c, g, or t  
66 <220> FEATURE:  
67 <221> NAME/KEY: misc\_feature

(p5,6-8)

ENTERED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004

TIME: 10:55:55

Input Set : A:\pto.lm.TXT

Output Set: N:\CRF4\08272004\J812827.raw

68 <222> LOCATION: (19)..(19)  
69 <223> OTHER INFORMATION: n is a, c, g, or t  
71 <220> FEATURE:  
72 <221> NAME/KEY: misc\_feature  
73 <222> LOCATION: (25)..(25)  
74 <223> OTHER INFORMATION: n is a, c, g, or t  
76 <220> FEATURE:  
77 <221> NAME/KEY: misc\_feature  
78 <222> LOCATION: (38)..(38)  
79 <223> OTHER INFORMATION: n is a, c, g, or t  
81 <220> FEATURE:  
82 <221> NAME/KEY: misc\_feature  
83 <222> LOCATION: (40)..(40)  
84 <223> OTHER INFORMATION: n is a, c, g, or t  
86 <220> FEATURE:  
87 <221> NAME/KEY: misc\_feature  
88 <222> LOCATION: (42)..(42)  
89 <223> OTHER INFORMATION: n is a, c, g, or t  
91 <220> FEATURE:  
92 <221> NAME/KEY: misc\_feature  
93 <222> LOCATION: (44)..(44)  
94 <223> OTHER INFORMATION: n is a, c, g, or t  
96 <220> FEATURE:  
97 <221> NAME/KEY: misc\_feature  
98 <222> LOCATION: (64)..(66)  
99 <223> OTHER INFORMATION: n is a, c, g, or t  
101 <220> FEATURE:  
102 <221> NAME/KEY: misc\_feature  
103 <222> LOCATION: (70)..(71)  
104 <223> OTHER INFORMATION: n is a, c, g, or t  
106 <220> FEATURE:  
107 <221> NAME/KEY: misc\_feature  
108 <222> LOCATION: (81)..(81)  
109 <223> OTHER INFORMATION: n is a, c, g, or t  
111 <220> FEATURE:  
112 <221> NAME/KEY: misc\_feature  
113 <222> LOCATION: (86)..(86)  
114 <223> OTHER INFORMATION: n is a, c, g, or t  
116 <220> FEATURE:  
117 <221> NAME/KEY: misc\_feature  
118 <222> LOCATION: (89)..(89)  
119 <223> OTHER INFORMATION: n is a, c, g, or t  
121 <220> FEATURE:  
122 <221> NAME/KEY: misc\_feature  
123 <222> LOCATION: (117)..(117)  
124 <223> OTHER INFORMATION: n is a, c, g, or t  
126 <220> FEATURE:  
127 <221> NAME/KEY: misc\_feature  
128 <222> LOCATION: (121)..(121)

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:55

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

129 <223> OTHER INFORMATION: n is a, c, g, or t  
131 <220> FEATURE:  
132 <221> NAME/KEY: misc\_feature  
133 <222> LOCATION: (123)..(123)  
134 <223> OTHER INFORMATION: n is a, c, g, or t  
136 <220> FEATURE:  
137 <221> NAME/KEY: misc\_feature  
138 <222> LOCATION: (135)..(135)  
139 <223> OTHER INFORMATION: n is a, c, g, or t  
141 <220> FEATURE:  
142 <221> NAME/KEY: misc\_feature  
143 <222> LOCATION: (143)..(143)  
144 <223> OTHER INFORMATION: n is a, c, g, or t  
146 <220> FEATURE:  
147 <221> NAME/KEY: misc\_feature  
148 <222> LOCATION: (177)..(177)  
149 <223> OTHER INFORMATION: n is a, c, g, or t  
151 <220> FEATURE:  
152 <221> NAME/KEY: misc\_feature  
153 <222> LOCATION: (179)..(179)  
154 <223> OTHER INFORMATION: n is a, c, g, or t  
156 <220> FEATURE:  
157 <221> NAME/KEY: misc\_feature  
158 <222> LOCATION: (181)..(181)  
159 <223> OTHER INFORMATION: n is a, c, g, or t  
161 <220> FEATURE:  
162 <221> NAME/KEY: misc\_feature  
163 <222> LOCATION: (193)..(194)  
164 <223> OTHER INFORMATION: n is a, c, g, or t  
166 <220> FEATURE:  
167 <221> NAME/KEY: misc\_feature  
168 <222> LOCATION: (209)..(210)  
169 <223> OTHER INFORMATION: n is a, c, g, or t  
171 <220> FEATURE:  
172 <221> NAME/KEY: misc\_feature  
173 <222> LOCATION: (215)..(215)  
174 <223> OTHER INFORMATION: n is a, c, g, or t  
176 <220> FEATURE:  
177 <221> NAME/KEY: misc\_feature  
178 <222> LOCATION: (217)..(217)  
179 <223> OTHER INFORMATION: n is a, c, g, or t  
181 <220> FEATURE:  
182 <221> NAME/KEY: misc\_feature  
183 <222> LOCATION: (221)..(221)  
184 <223> OTHER INFORMATION: n is a, c, g, or t  
186 <220> FEATURE:  
187 <221> NAME/KEY: misc\_feature  
188 <222> LOCATION: (228)..(228)  
189 <223> OTHER INFORMATION: n is a, c, g, or t

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:55

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

191 <220> FEATURE:  
192 <221> NAME/KEY: misc\_feature  
193 <222> LOCATION: (233)..(233)  
194 <223> OTHER INFORMATION: n is a, c, g, or t  
196 <220> FEATURE:  
197 <221> NAME/KEY: misc\_feature  
198 <222> LOCATION: (236)..(236)  
199 <223> OTHER INFORMATION: n is a, c, g, or t  
201 <220> FEATURE:  
202 <221> NAME/KEY: misc\_feature  
203 <222> LOCATION: (243)..(243)  
204 <223> OTHER INFORMATION: n is a, c, g, or t  
206 <220> FEATURE:  
207 <221> NAME/KEY: misc\_feature  
208 <222> LOCATION: (251)..(254)  
209 <223> OTHER INFORMATION: n is a, c, g, or t  
211 <220> FEATURE:  
212 <221> NAME/KEY: misc\_feature  
213 <222> LOCATION: (270)..(270)  
214 <223> OTHER INFORMATION: n is a, c, g, or t  
216 <220> FEATURE:  
217 <221> NAME/KEY: misc\_feature  
218 <222> LOCATION: (272)..(272)  
219 <223> OTHER INFORMATION: n is a, c, g, or t  
221 <220> FEATURE:  
222 <221> NAME/KEY: misc\_feature  
223 <222> LOCATION: (274)..(275)  
224 <223> OTHER INFORMATION: n is a, c, g, or t  
226 <220> FEATURE:  
227 <221> NAME/KEY: misc\_feature  
228 <222> LOCATION: (283)..(283)  
229 <223> OTHER INFORMATION: n is a, c, g, or t  
231 <220> FEATURE:  
232 <221> NAME/KEY: misc\_feature  
233 <222> LOCATION: (292)..(293)  
234 <223> OTHER INFORMATION: n is a, c, g, or t  
236 <220> FEATURE:  
237 <221> NAME/KEY: misc\_feature  
238 <222> LOCATION: (299)..(299)  
239 <223> OTHER INFORMATION: n is a, c, g, or t  
241 <220> FEATURE:  
242 <221> NAME/KEY: misc\_feature  
243 <222> LOCATION: (303)..(303)  
244 <223> OTHER INFORMATION: n is a, c, g, or t  
246 <220> FEATURE:  
247 <221> NAME/KEY: misc\_feature  
248 <222> LOCATION: (307)..(307)  
249 <223> OTHER INFORMATION: n is a, c, g, or t  
251 <220> FEATURE:

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004

TIME: 10:55:55

Input Set : A:\pto.lm.TXT

Output Set: N:\CRF4\08272004\J812827.raw

252 <221> NAME/KEY: misc\_feature  
253 <222> LOCATION: (312)..(312)  
254 <223> OTHER INFORMATION: n is a, c, g, or t  
256 <220> FEATURE:  
257 <221> NAME/KEY: misc\_feature  
258 <222> LOCATION: (319)..(319)  
259 <223> OTHER INFORMATION: n is a, c, g, or t  
261 <220> FEATURE:  
262 <221> NAME/KEY: misc\_feature  
263 <222> LOCATION: (324)..(325)  
264 <223> OTHER INFORMATION: n is a, c, g, or t  
266 <220> FEATURE:  
267 <221> NAME/KEY: misc\_feature  
268 <222> LOCATION: (328)..(329)  
269 <223> OTHER INFORMATION: n is a, c, g, or t  
271 <220> FEATURE:  
272 <221> NAME/KEY: misc\_feature  
273 <222> LOCATION: (342)..(342)  
274 <223> OTHER INFORMATION: n is a, c, g, or t  
276 <220> FEATURE:  
277 <221> NAME/KEY: misc\_feature  
278 <222> LOCATION: (345)..(345)  
279 <223> OTHER INFORMATION: n is a, c, g, or t  
281 <220> FEATURE:  
282 <221> NAME/KEY: misc\_feature  
283 <222> LOCATION: (366)..(366)  
284 <223> OTHER INFORMATION: n is a, c, g, or t  
286 <220> FEATURE:  
287 <221> NAME/KEY: misc\_feature  
288 <222> LOCATION: (377)..(377)  
289 <223> OTHER INFORMATION: n is a, c, g, or t  
291 <220> FEATURE:  
292 <221> NAME/KEY: misc\_feature  
293 <222> LOCATION: (382)..(382)  
294 <223> OTHER INFORMATION: n is a, c, g, or t  
296 <220> FEATURE:  
297 <221> NAME/KEY: misc\_feature  
298 <222> LOCATION: (391)..(391)  
299 <223> OTHER INFORMATION: n is a, c, g, or t  
301 <220> FEATURE:  
302 <221> NAME/KEY: misc\_feature  
303 <222> LOCATION: (395)..(395)  
304 <223> OTHER INFORMATION: n is a, c, g, or t  
306 <220> FEATURE:  
307 <221> NAME/KEY: misc\_feature  
308 <222> LOCATION: (400)..(400)  
309 <223> OTHER INFORMATION: n is a, c, g, or t  
311 <220> FEATURE:  
312 <221> NAME/KEY: misc\_feature

RAW SEQUENCE LISTING ERROR SUMMARY  
 PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
 TIME: 10:55:57

Input Set : A:\pto.lm.TXT  
 Output Set: N:\CRF4\08272004\J812827.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 16, 19, 25, 38, 40, 42, 44, 61, 65, 66, 70, 71, 81, 86, 89, 117, 121, 123, 135  
 Seq#:2; N Pos. 143, 177, 179, 181, 193, 194, 203, 210, 215, 217, 221, 228, 233, 236, 248  
 Seq#:2; N Pos. 251, 252, 253, 254, 270, 272, 274, 275, 283, 292, 293, 299, 303, 307, 312  
 Seq#:2; N Pos. 319, 324, 325, 328, 329, 342, 345, 366, 377, 382, 391, 395, 400, 412, 413  
 Seq#:2; N Pos. 402, 424, 426, 433, 439, 442, 452, 460, 463, 471, 495, 500, 504, 516  
 Seq#:5; N Pos. 13, 14, 16, 20, 21, 25, 26, 27, 28, 42, 52, 55, 57, 59, 63, 65, 68, 72, 74, 77  
 Seq#:5; N Pos. 91, 102, 117, 127, 128, 169, 172, 192, 203, 243, 244, 248, 249, 253, 283  
 Seq#:5; N Pos. 288, 299, 318, 327, 334, 348, 359, 360  
 Seq#:6; N Pos. 475, 556, 559, 585, 606, 644, 671, 693, 695, 714, 742, 744, 756, 765, 768  
 Seq#:6; N Pos. 808, 815, 823, 830, 837  
 Seq#:10; N Pos. 433, 600, 615, 626, 645, 661  
 Seq#:14; N Pos. 6, 15, 37, 38, 47, 56, 57, 94, 127, 155, 157  
 Seq#:16; N Pos. 5, 15, 39, 47, 52, 69, 154, 207, 217  
 Seq#:17; N Pos. 18, 19, 27, 47, 66, 76, 82, 108, 133, 162, 210, 260, 276  
 Seq#:19; N Pos. 17, 40, 59, 76, 107, 165, 189, 216, 221, 230  
 Seq#:21; N Pos. 17, 23, 28, 36, 41, 44, 53, 59, 62, 67, 70, 71, 74, 76, 79, 83, 84, 86, 97  
 Seq#:22; N Pos. 2, 17, 37, 52, 53, 56, 77, 85, 89, 96  
 Seq#:23; N Pos. 17, 19, 27, 28, 29, 37, 38, 46, 49, 65, 72  
 Seq#:24; N Pos. 5, 13, 71, 88, 91, 109, 157, 177, 199, 207, 211  
 Seq#:26; N Pos. 299, 333, 353, 410, 411, 460, 474, 479  
 Seq#:27; N Pos. 348, 422, 435, 476, 490  
 Seq#:28; N Pos. 18, 47, 59, 74, 138, 174, 176, 211  
 Seq#:29; N Pos. 1, 2, 12, 29, 34  
 Seq#:30; N Pos. 3, 4, 5, 6, 8, 13, 15, 20, 27, 32, 33, 40, 49, 50, 57, 63, 67, 69, 76, 78, 87  
 Seq#:30; N Pos. 89  
 Seq#:31; N Pos. 12, 26, 46, 49, 55, 60, 63, 69, 70, 73, 79, 92, 96  
 Seq#:32; N Pos. 2, 7, 27, 34, 57, 63, 64, 67, 73, 75, 76, 77, 78, 80, 90, 96, 97, 98  
 Seq#:33; N Pos. 5, 12, 28, 32, 38, 44, 57, 68, 76, 82, 92  
 Seq#:34; N Pos. 3, 21, 27, 28, 38, 47, 50, 53, 61, 73, 78, 83, 85, 97  
 Seq#:35; N Pos. 21, 22, 28, 32, 65, 67, 68, 70, 77, 83, 92  
 Seq#:36; N Pos. 4, 8, 29, 43, 44, 46, 57, 59, 84, 98, 115, 117, 118  
 Seq#:37; N Pos. 7, 10, 53, 61, 65, 66, 72, 74, 75, 89, 94, 100, 107, 126, 141  
 Seq#:38; N Pos. 2, 10, 61, 63, 72, 79  
 Seq#:39; N Pos. 5, 7, 8, 10, 15, 16, 20, 24, 71  
 Seq#:40; N Pos. 80, 91  
 Seq#:42; N Pos. 14, 31, 36, 63, 73, 93, 98  
 Seq#:44; N Pos. 2, 11, 27, 28, 34, 38, 39, 41, 49, 50, 61, 62, 67, 68, 76, 79, 80, 85, 89, 93  
 Seq#:45; N Pos. 8, 24, 33, 34, 47, 48, 58, 63, 68, 71, 73, 77, 88, 95, 96  
 Seq#:46; N Pos. 74  
 Seq#:47; N Pos. 7, 8, 17, 23, 33, 42, 47, 48, 52, 55, 60, 62, 66, 70, 71, 74, 84, 86, 87, 96  
 Seq#:47; N Pos. 99, 100  
 Seq#:48; N Pos. 5, 6, 33, 35, 36, 42, 46, 48, 55, 59, 69, 81, 87, 91, 94, 97  
 Seq#:49; N Pos. 20, 38, 164, 178, 201, 211, 274, 305, 340, 346, 386, 387, 405, 433, 446  
 Seq#:50; N Pos. 5, 6, 13, 18, 22, 39, 45, 48, 54, 65, 70, 72, 80, 83, 90, 94, 96, 98, 102, 104

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:57

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

eq#:50; N Pos. 113,115,117,121,123,125,128,142,144,160,174,175,180,181,186  
eq#:50; N Pos. 192,198,205,215,223,224,233,234,238,243,253,257,268,280,291  
eq#:50; N Pos. 296,300,305,308,311,319,322,326,328,334,335,338,339,347,352  
eq#:50; N Pos. 358,361,367,382,389,395,410,413,414,418,425,436,443  
eq#:51; N Pos. 19,59,87,119,203,215,274,296,309,353,425,426,427,431,451  
eq#:51; N Pos. 470,472,478  
eq#:52; N Pos. 13,14,17,20,22,27,29,31,36,43,46,58,59,74,78,81,85,87,88,90  
eq#:52; N Pos. 91,92,95,96,105,107,109,115,116,117,120,123,148,154,155,156  
eq#:52; N Pos. 167,169,170,171,172,179,183,185,186,187,194,200,201,202,203  
eq#:52; N Pos. 205,235,236,242,244,246,247,250,303,305,318,327,331,335,336  
eq#:52; N Pos. 347,349,353,362,365,388,395,405,407,412,416,429,435,444,475  
eq#:52; N Pos. 481,485,488,505,506,507,525,528,532,534,535,543,551,552,553  
eq#:52; N Pos. 555,561,568,573,584,589,598,605,612,618,633,647,653,654,664  
eq#:52; N Pos. 679,689,695,698,711,720  
eq#:53; N Pos. 13,15,37,42,44,45,50,57,58,59,70,74,80  
eq#:55; N Pos. 5,32,40,60,62,76,107,155  
eq#:56; N Pos. 4  
eq#:69; N Pos. 356  
eq#:70; N Pos. 26  
eq#:71; N Pos. 5,19,29,38,42,45,49,61,77,79,88,90,100,110  
eq#:72; N Pos. 151  
eq#:73; N Pos. 7,16,233  
eq#:74; N Pos. 31,32,57  
eq#:76; N Pos. 11,35,37,38,43,56,67,71,75  
eq#:77; N Pos. 6,11  
eq#:78; N Pos. 11,20,24,31,38,53,61,62,66,83,84,92,109,115,146,153,166  
eq#:79; N Pos. 10,20,29,30,35,49,92  
eq#:80; N Pos. 9,88,98,105,107,127,142,147,161,166,167,171,180,196,206  
eq#:81; N Pos. 22,33,34,39  
eq#:82; N Pos. 13,16,33,46,47,78,82,83,121  
eq#:83; N Pos. 8,36  
eq#:84; N Pos. 30  
eq#:89; N Pos. 37,47,108,112,129,134,152,168,196,239  
eq#:91; N Pos. 326,338,339,344  
eq#:92; N Pos. 32,34  
eq#:94; N Pos. 5,25,38,39,44,46,59,66,70,74,80,82,83,84,86,90,91,92,112  
eq#:94; N Pos. 113,117,126,129,133,134,135,136,152,156,157,162,164,165,174  
eq#:94; N Pos. 178,181,185,186,187,190,191,194,206,227,231,235,244,247,251  
eq#:94; N Pos. 255,258,260,261,263,270,273,274,275,276,285,287,291,292,302  
eq#:94; N Pos. 305,306,311,318,319,321,327,328,329,333,348,349,352,357,363  
eq#:94; N Pos. 366,367,369,371,376,377,385,390,398,401,405,420,429,437,440  
eq#:94; N Pos. 442,443,453,455,456,473,474,477,481,487,488,495,496,497,500  
eq#:94; N Pos. 502,506  
eq#:95; N Pos. 11,24,40,48,51,71,80,83,91,95,99,111,115,116,118,121,123  
eq#:95; N Pos. 124,126,129,131,133,135,148,153,170,173,175,177,192,195,196  
eq#:95; N Pos. 198,200,201,211,212,219,222,223,226,231,240,243,244,249,255  
eq#:95; N Pos. 269,280,283,289,293,311,324,326,341,348,350,354,355,367,383  
eq#:95; N Pos. 384,391,398,400  
eq#:96; N Pos. 171,622,628,642,661,668,694,709,710,735,751,752,763,778,782

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:57

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

Seq#:96; N Pos. 786,788,798  
Seq#:98; N Pos. 17  
Seq#:99; N Pos. 8,361  
Seq#:100; N Pos. 8,39,50,56,71,72,97,110,177  
Seq#:101; N Pos. 121

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:57

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

L:11 M:256 W: Invalid Numeric Header Field, Wrong Current FILING DATE:YYYY-MM-DD  
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:60  
L:391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:120  
L:393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:180  
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:240  
L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:300  
L:399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:360  
L:401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:420  
L:403 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:480  
L:611 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:613 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:60  
L:615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:120  
L:617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:180  
L:619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:240  
L:621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:300  
L:747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:420  
L:751 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:540  
L:753 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:600  
L:755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:660  
L:757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:720  
L:759 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:780  
L:856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:420  
L:860 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:540  
L:862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:600  
L:864 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:660  
L:964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:60  
L:968 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:120  
L:1046 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:1048 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:60  
L:1050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:120  
L:1052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:180  
L:1122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:1124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:60  
L:1126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:120  
L:1128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:180  
L:1130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:240  
L:1213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:1215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:60  
L:1217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:120  
L:1219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:180  
L:1331 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
L:1333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:60  
L:1388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
L:1390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:60  
L:1440 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0  
L:1442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:60

**VERIFICATION SUMMARY**  
 PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
 TIME: 10:55:57

Input Set : A:\pto.lm.TXT  
 Output Set: N:\CRF4\08272004\J812827.raw

L:1507 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
 L:1509 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:60  
 L:1511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:120  
 L:1513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:180  
 L:1585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:240  
 L:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:300  
 L:1589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:360  
 L:1591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:420  
 L:1638 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:300  
 L:1642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:420  
 L:1644 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:480  
 L:1694 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
 L:1696 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:60  
 L:1698 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:120  
 L:1700 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:180  
 L:1730 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
 L:1827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
 L:1829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:60  
 L:1899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
 L:1901 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:60  
 L:1971 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
 L:1973 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:60  
 L:2038 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
 L:2040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:60  
 L:2115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0  
 L:2117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:60  
 L:2172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0  
 L:2174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:60  
 L:2239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0  
 L:2241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:60  
 L:2318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0  
 L:2320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:60  
 L:2322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:120  
 L:2362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0  
 L:2364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:60  
 L:2409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0  
 L:2411 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:60  
 L:2433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:60  
 L:2497 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0  
 L:2499 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:60  
 L:2594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0  
 L:2596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:60  
 L:2666 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0  
 L:2668 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:60  
 L:2685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:60  
 L:2780 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
 L:2782 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:60  
 L:2862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0  
 L:2864 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60

**VERIFICATION SUMMARY**  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:57

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

L:2944 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0  
 L:2948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:120  
 L:2950 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:180  
 L:2952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:240  
 L:2954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:300  
 L:2956 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:360  
 L:2958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:420  
 L:3318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0  
 L:3320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60  
 L:3322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:120  
 L:3324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:180  
 L:3326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:240  
 L:3328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:300  
 L:3330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:360  
 L:3332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:420  
 L:3422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0  
 L:3424 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:60  
 L:3428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:180  
 L:3430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:240  
 L:3432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:300  
 L:3436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:420  
 L:3900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0  
 L:3902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:60  
 L:3904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:120  
 L:3906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:180  
 L:3908 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:240  
 L:3910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:300  
 L:3912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:360  
 L:3914 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:420  
 L:3916 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:480  
 L:3918 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:540  
 L:3920 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:600  
 L:3922 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:660  
 L:3984 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0  
 L:3986 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:60  
 L:4061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0  
 L:4063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:60  
 L:4065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:120  
 L:4080 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0  
 L:4339 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:300  
 L:4356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0  
 L:4452 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0  
 L:4454 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:60  
 L:4475 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:120  
 L:4510 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0  
 L:4516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:180  
 L:4546 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:0  
 L:4617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0  
 L:4619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:60

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004  
TIME: 10:55:57

Input Set : A:\pto.lm.TXT  
Output Set: N:\CRF4\08272004\J812827.raw

L:4649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:0  
 L:4742 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0  
 L:4744 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:60  
 L:4746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:120  
 L:4794 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:0  
 L:4796 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:60  
 L:4878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:0  
 L:4880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:60  
 L:4882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:120  
 L:4884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:180  
 L:4909 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0  
 L:4968 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0  
 L:4970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:60  
 L:4972 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:120  
 L:5002 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:0  
 L:5021 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:0  
 L:5167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:0  
 L:5169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:60  
 L:5171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:120  
 L:5173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:89 after pos.:180  
 L:5227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:300  
 L:5249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:0  
 L:5671 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:0  
 L:5673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:60  
 L:5675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:120  
 L:5677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:180  
 L:5679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:240  
 L:5681 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:300  
 L:5683 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:360  
 L:5685 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:420  
 L:5687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:480  
 L:5982 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:0  
 L:5984 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:60  
 L:5986 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:120  
 L:5988 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:180  
 L:5990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:240  
 L:5992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:300  
 L:5994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:360  
 L:6088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:120  
 L:6104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:600  
 L:6106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:660  
 L:6108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:720  
 L:6110 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:780  
 L:6144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98 after pos.:0  
 L:6166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0  
 L:6178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:360  
 L:6232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:0  
 L:6234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:60  
 L:6236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100 after pos.:120

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/812,827

DATE: 08/27/2004

TIME: 10:55:57

Input Set : A:\pto.lm.TXT

Output Set: N:\CRF4\08272004\J812827.raw

L:6263 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:120